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pSecTag2 A, B, & C

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Description	Catalog No.	Size
<p>pSecTag2 and pSecTag2/Hygro are mammalian expression vectors designed for the secretion, purification, and detection of fusion proteins. Each vector has a large multiple cloning site in three reading frames to simplify cloning in frame with the N-terminal secretion signal. The vectors (Figure 1) offer the following features:</p> <ul style="list-style-type: none">■ Secretion signal from the V-J2-C region of the mouse Ig kappa- chain for efficient secretion of recombinant proteins (Figure 2)■ Cytomegalovirus (CMV) promoter for high-level constitutive expression■ C-terminal polyhistidine (6xHis) tag for rapid purification with ProBond™ resin and detection with an Anti-His(C-term) Antibody■ C-terminal c-myc epitope for detection with an Anti-myc Antibody■ Bovine growth hormone (BGH) polyadenylation signal and transcription termination sequence to enhance mRNA stability■ SV40 origin for episomal replication and simple vector rescue in cell lines expressing the large T antigen (e.g. COS-1, COS-7)	V90020	20 µg ea.

The pSecTag2 vectors carry the Zeocin™ resistance gene for cost-effective selection in mammalian cells. Zeocin™ selection can also be used in *E. coli*.

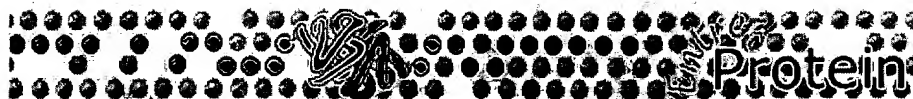
The pSecTag2/Hygro vectors have the hygromycin-B resistance gene for selection of stable mammalian cell lines.

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Technical Information

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Description	Doc Type
pSecTag2 A, B, and C	Manual
pSecTag A (replaced with pSecTag2)	Vector



Entrez	PubMed	Nucleotide	Protein	Genome	Structure	PMC	Taxonomy	Books
Search <u>Protein</u>		<input type="checkbox"/> for				<input type="button" value="Go"/>		<input type="button" value="Clear"/>
		Limits		Preview/Index		History		Clipboard
<input type="button" value="Display"/> default		<input type="checkbox"/> Show: 20		<input type="button" value="Send to"/> File		<input type="button" value="Get Subsequence"/>		

☐ 1: NP_002765. kallikrein 6 prep...[gi:4506155]

[BLink](#), [Domains](#), [Links](#)

LOCUS NP_002765 244 aa linear PRI 04-OCT-2003
 DEFINITION kallikrein 6 preproprotein; protease M; protease, serine, 9;
 neurosin; zyme [Homo sapiens].
 ACCESSION NP_002765
 VERSION NP_002765.1 GI:4506155
 DBSOURCE REFSEQ: accession NM_002774.2
 KEYWORDS .
 SOURCE Homo sapiens (human)
 ORGANISM Homo sapiens
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
 REFERENCE 1 (residues 1 to 244)
 AUTHORS Magklara,A., Mellati,A.A., Wasney,G.A., Little,S.P.,
 Sotiropoulou,G., Becker,G.W. and Diamandis,E.P.
 TITLE Characterization of the enzymatic activity of human kallikrein 6:
 Autoactivation, substrate specificity, and regulation by inhibitors
 JOURNAL Biochem. Biophys. Res. Commun. 307 (4), 948-955 (2003)
 MEDLINE 22760274
 PUBMED 12878203
 REMARK GeneRIF: Characterization of the enzymatic activity of kallikrein
 6.
 REFERENCE 2 (residues 1 to 244)
 AUTHORS Mitsui,S., Okui,A., Uemura,H., Mizuno,T., Yamada,T., Yamamura,Y.
 and Yamaguchi,N.
 TITLE Decreased cerebrospinal fluid levels of neurosin (KLK6), an
 aging-related protease, as a possible new risk factor for
 Alzheimer's disease
 JOURNAL Ann. N. Y. Acad. Sci. 977, 216-223 (2002)
 MEDLINE 22367930
 PUBMED 12480753
 REMARK GeneRIF: Decreased cerebrospinal fluid levels may be a possible
 risk factor for Alzheimer's disease
 REFERENCE 3 (residues 1 to 244)
 AUTHORS Hoffman,B.R., Katsaros,D., Scorilas,A., Diamandis,P.,
 Fracchioli,S., Rigault de la Longrais,I.A., Colgan,T., Puopolo,M.,
 Giardina,G., Massobrio,M. and Diamandis,E.P.
 TITLE Immunofluorometric quantitation and histochemical localisation of
 kallikrein 6 protein in ovarian cancer tissue: a new independent
 unfavourable prognostic biomarker
 JOURNAL Br. J. Cancer 87 (7), 763-771 (2002)
 MEDLINE 22217262
 PUBMED 12232761
 REMARK GeneRIF: Immunofluorometric quantitation and histochemical
 localisation of kallikrein 6 protein in ovarian cancer tissue: a
 new independent unfavourable prognostic biomarker.
 REFERENCE 4 (residues 1 to 244)
 AUTHORS Gomis-Ruth,F.X., Bayes,A., Sotiropoulou,G., Pampalakis,G.,
 Tsetsenis,T., Villegas,V., Aviles,F.X. and Coll,M.
 TITLE The structure of human prokallikrein 6 reveals a novel activation
 mechanism for the kallikrein family
 JOURNAL J. Biol. Chem. 277 (30), 27273-27281 (2002)

MEDLINE 22128894
PUBMED 12016211
REMARK GeneRIF: X-ray crystallographic structure of KLK6.
REFERENCE 5 (residues 1 to 244)
AUTHORS Bernett,M.J., Blaber,S.I., Scarisbrick,I.A., Dhanarajan,P., Thompson,S.M. and Blaber,M.
TITLE Crystal structure and biochemical characterization of human kallikrein 6 reveals that a trypsin-like kallikrein is expressed in the central nervous system
JOURNAL J. Biol. Chem. 277 (27), 24562-24570 (2002)
MEDLINE 22086202
PUBMED 11983703
REMARK GeneRIF: characterization of human kallikrein 6 as a degradative protease with structural features more similar to trypsin than the regulatory kallikreins
REFERENCE 6 (residues 1 to 244)
AUTHORS Scarisbrick,I.A., Blaber,S.I., Lucchinetti,C.F., Genain,C.P., Blaber,M. and Rodriguez,M.
TITLE Activity of a newly identified serine protease in CNS demyelination
JOURNAL Brain 125 (Pt 6), 1283-1296 (2002)
MEDLINE 22017794
PUBMED 12023317
REMARK GeneRIF: Kallikrein 6, a myelencephalon-specific protease expressed in the adult central nervous system (CNS), is present in inflammatory CNS lesions (e.g., multiple sclerosis) and in excess promotes CNS demyelination.
REFERENCE 7 (residues 1 to 244)
AUTHORS Zarghooni,M., Soosaipillai,A., Grass,L., Scorilas,A., Mirazimi,N. and Diamandis,E.P.
TITLE Decreased concentration of human kallikrein 6 in brain extracts of Alzheimer's disease patients
JOURNAL Clin. Biochem. 35 (3), 225-231 (2002)
MEDLINE 22069983
PUBMED 12074831
REMARK GeneRIF: Decreased concentration of human kallikrein 6 in brain extracts of Alzheimer's disease patients
REFERENCE 8 (residues 1 to 244)
AUTHORS Gan,L., Lee,I., Smith,R., Argonza-Barrett,R., Lei,H., McCuaig,J., Moss,P., Paeper,B. and Wang,K.
TITLE Sequencing and expression analysis of the serine protease gene cluster located in chromosome 19q13 region
JOURNAL Gene 257 (1), 119-130 (2000)
MEDLINE 20510030
PUBMED 11054574
REFERENCE 9 (residues 1 to 244)
AUTHORS Yousef,G.M., Luo,L.Y., Scherer,S.W., Sotiropoulou,G. and Diamandis,E.P.
TITLE Molecular characterization of zyme/protease M/neurosin (PRSS9), a hormonally regulated kallikrein-like serine protease
JOURNAL Genomics 62 (2), 251-259 (1999)
MEDLINE 20079158
PUBMED 10610719
REFERENCE 10 (residues 1 to 244)
AUTHORS Little,S.P., Dixon,E.P., Norris,F., Buckley,W., Becker,G.W., Johnson,M., Dobbins,J.R., Wyrick,T., Miller,J.R., MacKellar,W., Hepburn,D., Corvalan,J., McClure,D., Liu,X., Stephenson,D., Clemens,J. and Johnstone,E.M.
TITLE Zyme, a novel and potentially amyloidogenic enzyme cDNA isolated from Alzheimer's disease brain
JOURNAL J. Biol. Chem. 272 (40), 25135-25142 (1997)
MEDLINE 97460104
PUBMED 9312124
REFERENCE 11 (residues 1 to 244)
AUTHORS Yamashiro,K., Tsuruoka,N., Kodama,S., Tsujimoto,M., Yamamura,Y., Tanaka,T., Nakazato,H. and Yamaguchi,N.

TITLE Molecular cloning of a novel trypsin-like serine protease
 (neurosin) preferentially expressed in brain
 JOURNAL Biochim. Biophys. Acta 1350 (1), 11-14 (1997)
 MEDLINE 97157069
 PUBMED 9003450
 REFERENCE 12 (residues 1 to 244)
 AUTHORS Anisowicz,A., Sotiropoulou,G., Stenman,G., Mok,S.C. and Sager,R.
 TITLE A novel protease homolog differentially expressed in breast and
 ovarian cancer
 JOURNAL Mol. Med. 2 (5), 624-636 (1996)
 MEDLINE 97053999
 PUBMED 8898378
 COMMENT REVIEWED REFSEQ: This record has been curated by NCBI staff. The
 reference sequence was derived from U62801.1 and AF013988.1.

Summary: Kallikreins are a subgroup of serine proteases having
 diverse physiological functions. Growing evidence suggests that
 many kallikreins are implicated in carcinogenesis and some have
 potential as novel cancer and other disease biomarkers. This gene
 is one of the fifteen kallikrein subfamily members located in a
 cluster on chromosome 19. The encoded enzyme is regulated by
 steroid hormones. In tissue culture, the enzyme has been found to
 generate amyloidogenic fragments from the amyloid precursor
 protein, suggesting a potential for involvement in Alzheimer's
 disease.

FEATURES Location/Qualifiers
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 241 iqak

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